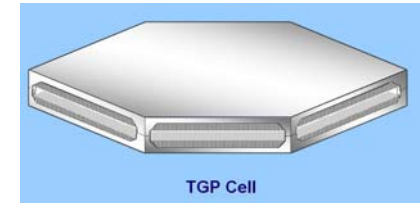
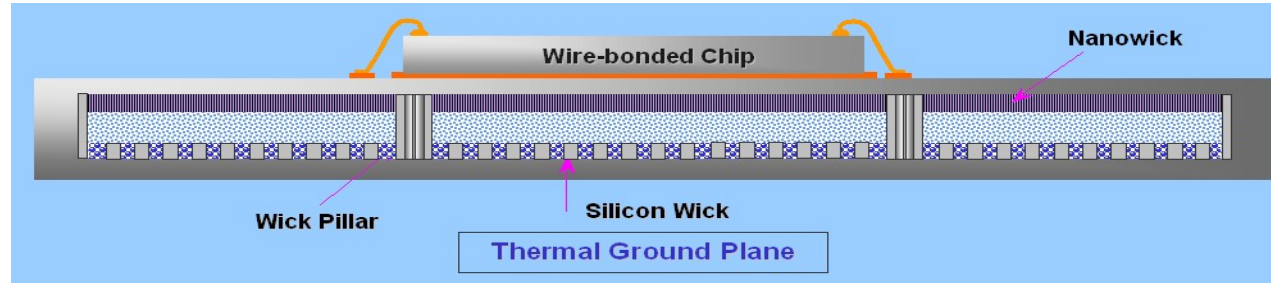




Revolutionary Vapor Chamber with Engineered Adaptive Multiscale Wick

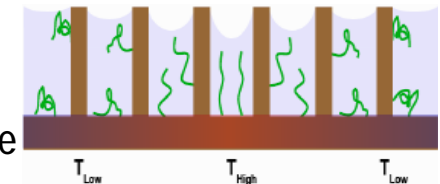
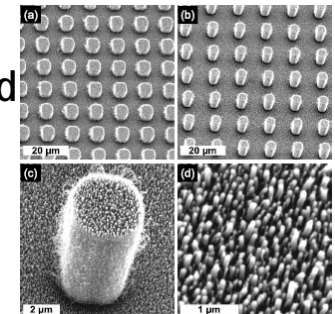
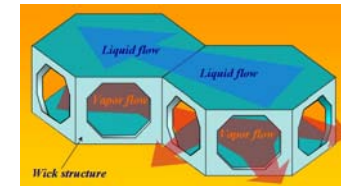


Approach:

- Integrate surface-engineered nanoscale wick structures with precision micromachined Si vapor chamber to achieve ultra-high thermal conductivity
- Enables high performance, large-area heat spreading

Unique Features:

- Advanced Multiscale Nanotube Wicks:** Patterned low-temperature CNT arrays provide optimal wick structure with high pumping force, low flow resistance, and high heat transfer capacity.
- Surface Engineered Wick Materials:** Enhanced effective thermal conductivity and capillary pumping force for high-g operation. Novel thermally responsive coatings provide adaptability to heat load.
- Robust Scalable Mechanical Design:** Cellular-based vapor chambers enhance mechanical robustness and facilitate scaling.
- Excellent Manufacturability:** Exploit Si-based microfabrication for cost-effective volume manufacturing, inherent CTE matching



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